

***FlyBy Math™* Alignment**  
**Mathematics Grade-Level Expectations**

**Number and Number Relations**

**Grade-Level Expectations**

9. Use mental math and estimation strategies to predict the results of computations (i.e., whole numbers, addition and subtraction of fractions) and to test the reasonableness of solutions (N-6-M) (N-2-M)

***FlyBy Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Predict outcomes and explain results of mathematical models and experiments.

**Measurement**

**Grade-Level Expectations**

16. Apply the concepts of elapsed time in real-life situations and calculate equivalent times across time zones in real-life problems (M-1-M) (M-6-M)

***FlyBy Math™* Activities**

--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

18. Estimate time, temperature, weight/mass, and length in familiar situations and explain the reasonableness of answers (M-2-M)

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Predict outcomes and explain results of mathematical models and experiments.

20. Identify appropriate tools and units with which to measure time, mass, weight, temperature, and length (M-3-M)

--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

**Geometry**

**Grade-Level Expectations**

27. Identify and plot points on a coordinate grid in the first quadrant (G-6-M)

***FlyBy Math™* Activities**

--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

**Data Analysis, Probability, and Discrete Math**

**Grade-Level Expectations**

28. Use various types of charts and graphs, including double bar graphs, to organize, display, and interpret data and discuss patterns verbally and in writing (D-1-M) (D-2-M) (P-3-M) (A-4-M)

***FlyBy Math™* Activities**

--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.